

**To:** Rao, Kate[Rao.kate@epa.gov]; Albright, David[Albright.David@epa.gov]  
**From:** Dermer, Michele  
**Sent:** Fri 3/25/2016 4:41:26 PM  
**Subject:** RE: Technical Direction Memo: Contract No. EP-C-15-022, WA 0-90; Task 1, Subtask 1.2 -- Excelsior Mining Company - Class III UIC Permit # R9UIC-AZ1-FY-16-1, Permit Technical Review Analysis

Don't sweat it Kate, I was picking on David who seemed to think I was eating bon bons instead of doing my job. He has bigger things to worry about than you and I.

**From:** Rao, Kate  
**Sent:** Friday, March 25, 2016 8:16 AM  
**To:** Dermer, Michele <Dermer.Michele@epa.gov>; Albright, David <Albright.David@epa.gov>  
**Subject:** RE: Technical Direction Memo: Contract No. EP-C-15-022, WA 0-90; Task 1, Subtask 1.2 -- Excelsior Mining Company - Class III UIC Permit # R9UIC-AZ1-FY-16-1, Permit Technical Review Analysis

Yes, I added language to try to clarify request and I messed it up. I already sent an email to Jonathan. Nancy will clarify request at kick-off call. So I think we are all ok. Sorry about this.

\*\*\*\*\*

Kate Rao  
Drinking Water Protection Section (WTR 3-2)  
USEPA Region 9  
75 Hawthorne St., San Francisco, CA 94105  
tel: (415) 972-3533 / fax: (415) 947-3549

**From:** Dermer, Michele  
**Sent:** Thursday, March 24, 2016 5:09 PM  
**To:** Albright, David <Albright.David@epa.gov>  
**Cc:** Rao, Kate <Rao.kate@epa.gov>  
**Subject:** RE: Technical Direction Memo: Contract No. EP-C-15-022, WA 0-90; Task 1, Subtask 1.2 -- Excelsior Mining Company - Class III UIC Permit # R9UIC-AZ1-FY-16-1, Permit Technical Review Analysis

## Ex. 5 - Deliberative Process

**From:** Albright, David  
**Sent:** Thursday, March 24, 2016 4:31 PM  
**To:** Dermer, Michele <[Dermer.Michele@epa.gov](mailto:Dermer.Michele@epa.gov)>  
**Subject:** Re: Technical Direction Memo: Contract No. EP-C-15-022, WA 0-90; Task 1, Subtask 1.2 -- Excelsior Mining Company - Class III UIC Permit # R9UIC-AZ1-FY-16-1, Permit Technical Review Analysis

Michele, please assist Kate in clarifying the TDM, as needed.

Sent from my iPhone

On Mar 24, 2016, at 3:54 PM, Dermer, Michele <[Dermer.Michele@epa.gov](mailto:Dermer.Michele@epa.gov)> wrote:

Sounds good. Thanks.

**From:** Rao, Kate  
**Sent:** Thursday, March 24, 2016 3:51 PM  
**To:** Dermer, Michele <[Dermer.Michele@epa.gov](mailto:Dermer.Michele@epa.gov)>  
**Cc:** Albright, David <[Albright.David@epa.gov](mailto:Albright.David@epa.gov)>; Rumrill, Nancy <[Rumrill.Nancy@epa.gov](mailto:Rumrill.Nancy@epa.gov)>  
**Subject:** RE: Technical Direction Memo: Contract No. EP-C-15-022, WA 0-90; Task 1, Subtask 1.2 -- Excelsior Mining Company - Class III UIC Permit # R9UIC-AZ1-FY-16-1, Permit Technical Review Analysis

Ok – sorry about that. I did add it in to try to be clear. Will clarify with Jonathan and then Nancy can discuss on the kick-off call.

\*\*\*\*\*  
Kate Rao  
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75 Hawthorne St., San Francisco, CA 94105  
tel: (415) 972-3533 / fax: (415) 947-3549

**From:** Dermer, Michele

**Sent:** Thursday, March 24, 2016 3:45 PM

**To:** Rao, Kate <Rao.kate@epa.gov>

**Cc:** Albright, David <Albright.David@epa.gov>; Rumrill, Nancy <Rumrill.Nancy@epa.gov>

**Subject:** RE: Technical Direction Memo: Contract No. EP-C-15-022, WA 0-90; Task 1, Subtask 1.2 -- Excelsior Mining Company - Class III UIC Permit # R9UIC-AZ1-FY-16-1, Permit Technical Review Analysis

Wait, The big list you provided must be from the SOW. Its not entirely correct since this is Class III. If its confusing, you could say “should include the following as agreed upon with the technical lead” or something like that.

**From:** Rao, Kate

**Sent:** Thursday, March 24, 2016 3:34 PM

**To:** Jonathan.Koplos@cadmusgroup.com

**Cc:** Albright, David <Albright.David@epa.gov>; Rumrill, Nancy <Rumrill.Nancy@epa.gov>; Dermer, Michele <Dermer.Michele@epa.gov>; Parrotta, Nancy <Parrotta.Nancy@epa.gov>; Adams, Tammy <Adams.Tammy@epa.gov>

**Subject:** Technical Direction Memo: Contract No. EP-C-15-022, WA 0-90; Task 1, Subtask 1.2 -- Excelsior Mining Company - Class III UIC Permit # R9UIC-AZ1-FY-16-1, Permit Technical Review Analysis

Hi Jonathan – another work request under WA 0-90. Please let me know who the technical lead will be on this project. I have one hardcopy application with CDs that I will send to the tech lead and have another set of CDs (includes complete revised application) that I can send to you if needed. Nancy Rumrill is the tech lead for EPA.

Please let me know if you have any questions.

Thanks. Kate

**Contract No. EP-C-15-022, Workplan Assignment No. 0-90**

**R9 Tech Support for Implementation of the UIC Program – Excelsior Mining Company - Class III UIC Permit #R9UIC-AZ1-FY-16-1**

**[Task 1; Subtask 1.2 - Permit Technical Review Analysis]**

### **Technical Direction**

**Background:** Excelsior Mining Company (Excelsior) has submitted a UIC area permit application to operate a Class III ISR copper mining facility in Chochise County, AZ. EPA determined that the application, which includes an aquifer exemption, is administratively complete (see attached letter). The applicant also submitted an Aquifer Protection Permit to the Arizona Department of Environmental Quality (ADEQ) and this is also available on CD.

**Action:** Under Task 1, Subtask 1.2 – Technical Review Analysis, review and provide an evaluation of Excelsior’s permit application, including the aquifer exemption proposal, dated *February 2016/revised March 2016*. The following evaluation must be conducted:

- Analyze well log data and testing results submitted by the prospective owner or operator.
- Evaluate local and regional geology, including injection zone and confining zone characteristics.
- Assess area of review (AoR) determinations or zone of endangering influence calculations, including information related to aquifer exemptions (if applicable).
- Provide recommendations for any corrective action required at existing wells within the AoR.
- Identify and recommending technical terms and conditions to be imposed in the draft permit (related to well operation, monitoring, testing, reporting, and other activities required by applicable UIC Program regulations).
- Evaluate proposed plugging and abandonment plans.
- Assess the acceptability of proposed financial assurance procedures/mechanisms.

- Review and evaluation other applicable attachment(s) in the permit application.

**Deliverable:** Provide a technical analysis summarizing the results of the technical review of the permit application. The analysis should include an itemized list of additional information necessary to clarify, modify, or supplement the permit application materials. Deliverable should be emailed in WORD to Kate Rao and Nancy Rumrill. If necessary, based on further technical direction from Kate Rao, Cadmus may be asked to evaluate subsequent submittals made to address the identified technical deficiencies, until the permit application is determined to be technically sufficient.

**Material:**

- Hardcopy permit application (dated February 2016/revised March 2016) which includes CDs of a) February 2016 application, b) February 2016/revised March 2016 permit application, and c) ADEQ APP Application January 2016.
- March 24, 2016 Admin Review letter from EPA to Excelsior (attached).

**Estimated LOE:** Ex. 4 - CBI

**Schedule:** Due 8 weeks from the date of this TDM (May 19, 2016).

**Kick-off Call:** Nancy Rumrill will schedule a call with the Cadmus tech lead once the material is received to discuss the TDM. Ex. 4 - CBI